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10/576,691	02/07/2007	Tetsuo Isomura	00684.522284.	2096
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EXAMINER				
GONZALEZ, MILTON				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/576,691

**Applicant(s)**

ISOMURA, TETSUO

**Examiner**

MILTON GONZALEZ

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 07 February 2007.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-10 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 21 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date See Continuation Sheet  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Inventor's Patent Application  
6) ☐ Other: \_\_\_\_\_

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :04/21/2006; 09/21/2006; 12/06/2006.

**DETAILED ACTION*****Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the *“an electric accumulator and a driving motor”* in lines 2-4 of claim 7 must be shown or the features canceled from the claim. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The abstract of the disclosure is objected to because includes legal phraseology, such as "*means*". Correction is required. See MPEP § 608.01(b).

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

in line 2 of claim 2, "*a starter*" lacks of antecedent basis in the specification.

in lines 2 and 3 of claim 7, "*an electric accumulator*" lacks of antecedent basis in the specification.

in line 1 of claims 2-7, 9 and 10, "*a toner supply container*" lacks of antecedent basis in the specification.

in line 2 of claim 5, "*a vibration member*" lacks of antecedent basis in the specification.

For claim 5 interpretation, Examiner construes "*a vibration member*" as the developer storage pouch (20).

### ***Claim Objections***

Claim 1 objected to because of the following informality: in line 3 "*storing*" should be change to "stored" as an obvious spelling error. Appropriate correction is required.

Claim 2-7, 9 and 10 are objected to because of the following informalities: in line 1 of each claim "*a toner supply container*", should be changed to "the

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developer supply container" in order to correspond with claims 1 and 8.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Diehl (US 5,426,492, cited on IDS)

Regarding claim 1, Diehl discloses a developer supply container (see Fig. 1 element 80) detachably mountable to an image forming apparatus, said developer supply container (80) comprising:

a container body (see Fig. 1 element 82) for accommodating a developer, said container body (82) being provided with

a discharge opening (see Fig. 1 element 90) for permitting discharging of the developer;

feeding means (see Fig. 2 element 86) for feeding the developer in said container body (82) toward said discharge opening (90); and

a driving source (see Fig. 2 element 94) for driving said feeding means (86).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diehl in view of Sugiyama (JP 2000-155459, see English translation).

Regarding claim 2, Diehl is applied as above. Diehl does not disclose a developer supply container, further comprising a starter, operable from said image forming apparatus, for starting said driving source.

Sugiyama discloses a developer supply container, further comprising a starter (see Fig. 3b element 82), operable from said image forming apparatus actuator (see Fig. 1 element 6).

It would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the invention of Diehl, by providing the starter, operable from said image forming apparatus, for starting said driving source of Sugiyama as a control device. One would have been motivated to provide this starter to shift the movable member toward the discharging opening by engaging such starter with the image apparatus actuator to control the amount of developer supplied with high precision (see [0022], lines 11-13 and 17-18).

Claims 3-6, 8 and 10 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Diehl in view of Tone et al. (JP 3116170, cited on IDS).

Regarding claims 3 and 8, Diehl is applied as above. Diehl does not disclose a developer supply container wherein said driving source is a compressed gas stored in a storing portion.

Tone et al. disclose a driving source being compressed gas stored in a storing portion (see Fig. 3 element 43b).

It would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the invention of Diehl, by providing the compressed gas storing portion of Tone et al. as a driving source. One would have been motivated to use compressed air as a driving source to quickly supply developer to the developing device (see abstract).

Regarding claim 4 and 10, Diehl and Tone et al. are applied as above. The modified Diehl device does disclose a specific range of pressure of the storing portion. However, it would have been obvious to one with ordinary skill in the art at the time the invention was made, to determine the optimum pressure range through routine experimentation. Furthermore, applicant has not shown that the claimed range produces any unexpected results.

Regarding claim 5, Diehl and Tone et al. are applied as above. The modified Diehl device also discloses a developer supply container wherein said feeding means includes a vibration member (see Fig. 1 element 84) vibratable with releasing of the compressed gas. As explained above the Examiner is considering the vibration member to be the developer storage pouch. Diehl



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discloses a pouch (84) which will become vibratable with releasing of the compressed gas in the modified Diehl device.

Regarding claim 6, Diehl and Tone et al. are applied as above. The modified Diehl device also discloses a developer supply container wherein said feeding means includes a movable member (86) movable toward said discharge opening (90) with releasing of the compressed gas.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diehl in view of Kasahara et al. (US 5,960,246).

Regarding claim 7, Diehl is applied as above. Diehl does not disclose a developer supply container, wherein said driving source includes an electric accumulator, and a driving motor driven by electric energy from said electric accumulator.

Kasahara et al. (246) disclose a developer supply device containing a power supply device separate from the image forming apparatus to drive motors (see Fig. 65 and col. 26, lines 66-67 and col. 27 lines 1-2).

It would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the invention of Diehl, by providing the power supply of Kasahara et al. (246). One would have been motivated to provide this separate power supply to reduce the drive load and consequently the power consumption of the image forming apparatus (see col. 27, lines 9-12).

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Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diehl in view of Kasahara et al. (US 6,201,941).

Regarding claim 9, Diehl is applied as above. Diehl does not disclose a developer supply container, further comprising a mechanism, operable from said image forming apparatus, for releasing the compressed gas into said container.

Kasahara et al. (941) disclose a developer supply container (see Fig. 15 element 20), comprising a mechanism (see Fig. 15), operable from said image forming apparatus, for releasing the compressed gas into said container (see col. 13 lines 18-21).

It would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the invention of Diehl, by providing the mechanism of Kasahara et al. (941) for releasing the compressed gas into the container. One would have been motivated to provide this mechanism to achieve rapid developer replenishment in great or small amounts in relationship with the printing speed (see col. 13 lines 50-54).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MILTON GONZALEZ whose telephone number is (571)270-7914. The examiner can normally be reached on 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jared Fureman can be reached on (571)272-2391. The

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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MG

/Jared J. Fureman/  
Supervisory Patent Examiner, Art  
Unit 4154

03/30/2009